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LANDRETHS'
PENNSYLVANIA CERTIFIED
TOMATO SEED

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U. S. Department of Agriculture.



LANDRETHS' CROWN PICKED CERTIFIED MARGLOBE TOMATO

**LANDRETHS' PENNSYLVANIA CERTIFIED
TOMATO SEED IS SCIENTIFICALLY PRODUCED**

FOR YOUR PROTECTION

**Landreths' Crown Picked Certified and Certified Tomato Seed is Sold Only in
One-quarter, One-half, and One Pound Cellophane-Wrapped,
Blue Cardboard, Lithographed Packages.**

**Each Package is Sealed with the Seal of the Department of Agriculture
of the State of Pennsylvania.**

GROWN BY

D. LANDRETH SEED CO., BRISTOL, PENNA.

LANDRETHS' PENNSYLVANIA CROWN PICKED CERTIFIED AND CERTIFIED TOMATO SEED

A PRODUCT OF SCIENTIFIC SELECTION

All growers who purchase seed expect and should obtain good crops from that seed. *Good Crops* can be produced only by the use of *Good Seed*. By *Good Seed* we mean:

First—Seed which will produce a crop true to type for the variety it represents.

Second—Seed which will produce high yields per acre.

Third—Seed free from disease.

Fourth—Seed of high vitality, that is, quick germinating qualities and the power to make rapid and vigorous growth.

LANDRETHS' PENNSYLVANIA CERTIFIED TOMATO SEEDS ARE GOOD SEEDS — "SEEDS WHICH SUCCEED"



Fruit Selected for Stock Seed

Fruit Selected From the Best Plants for Stock Seed. The plant is the basis of selection. The plants are approved first, then stock seed picked from the best plants.

THE LANDRETH SYSTEM OF TOMATO IMPROVEMENT

The beginning of any *Scientific Selection* must start with the *Plant*. The saving of perfect fruits for stock seed without consideration of the plants from which those fruits came is generally very disappointing. The crop produced from those perfect fruits may be very inferior. The above illustration is typical of Landreths' plant selected fruit.

LANDRETHS' TOMATO IMPROVEMENT STARTS WITH THE PLANT

Landreth tomato improvement work started many years ago. Because of the importance of the plant as the basis for selection, all tomato fields of the varieties to be improved must be carefully examined. The best plants are staked, given numbers, and the seed from each plant is saved separately.



A Staked Tomato Plant of The Rutgers Variety

Many such plants are staked each year. Vines as well as fruit are examined in selecting the best.

FOLLOWING THROUGH THE LANDRETH TOMATO PROGRAM

Every year, seed from each staked plant the previous year is planted separately and a plot grown of each selection. For many years, a system for the elimination of the poorer plant selections has been followed. This consists in:

First—grading and weighing the fruits from each selection.

Second—examining each plant for detection of disease and trueness to type.

Third—examining the exterior and interior color of the ripe fruits.

Fourth—careful notations on the shape and size of the fruits.

Fifth—the internal structure of the fruits carefully examined.

Every year this elimination is going on, the careful records taken, and the discarding of the plant selections which do not measure up to our very high standards. It is no wonder that numerous tests at various State Agricultural Experiment Stations have shown that our Pennsylvania Certified Tomato Seed is a superior product. Ask your own State Experiment Station about it.

LANDRETHS' TOMATO SELECTION

The accompanying illustrations show the major operations in the Landreth system of Tomato selection and breeding.



Checking Staked Plants

A Landreth Plant Breeder checking staked plants. Note the vigorous growth in this field of Marglobe planted 6 ft. between rows.



Note Taking

The staked plants are picked and weighed separately, and careful notes taken on exterior and interior of the fruits.



Saving the Seed

The seed is kept separate from each staked plant, and saved in a small cloth bag.

SYSTEM OF AND BREEDING

This work is done by a select group of experienced workers under expert supervision, and Landreths' specifications.



Drying Seed from Staked Plants

Each cheesecloth bag contains seed from an individual plant selection carefully tagged. The seed from each plant selection is kept in a separate seed envelope properly marked.



Stock Seed Drying

The fruits from the best tested plant selections are used for stock seed, squeezed in barrels, fermented, then washed and dried on screens.

Selfing and Crossing

The work of the tomato plant breeder is never finished. New varieties and better strains must be created. Landreths' Assistant Plant Breeders are shown crossing tomatoes.



PROCESSING PENNSYLVANIA TOMATO

Landreths' specifications for processing the certified seed for sale are equally as rigid as the requirements for the stock seed.



Tomatoes Ready for Seeding

Only red ripe, inspected fruits are used for Certified seed, the cream of the crop.



Government Inspection

The Government Inspector and the Seed Experts examining the fermenting seed saved in the barrels. Cooperation of all is necessary for the production of Landreths' Pennsylvania Certified tomato seed.



Washing the Seed

After fermentation, the seed is washed in several changes of water. Note the tagged barrels and bags of seed to prevent mixtures.

LANDRETHS' CERTIFIED SEED

The accompanying illustrations show the processes from the fruit ready for grinding to packing and shipping the certified seed.



Drying the Seed on Screens

This shows a corner of the drying yard at the warehouse where all the certified seed is dried in the sunshine. Bright, plump, high-germinating seed is the result.



Many Seeds for Many Acres

This pile is a part of the 1937 production of Landreths' Pennsylvania Certified tomato seed.

A Section of the Certified Tomato Seed Packing Department

Packing Landreths' Pennsylvania Certified Tomato Seed in cellophane-wrapped packages. Each package is sealed with the Seal of the Department of Agriculture of the State of Pennsylvania.



PENNSYLVANIA STATE TOMATO SEED CERTIFICATION REQUIREMENTS

TOMATO STOCK SEED

Before any variety can even be entered for certification in Pennsylvania, stock seed from carefully selected and staked plants must be saved the year previous to certification. D. Landreth Seed Co. goes further than that as shown by the previous pages, as our stock seed is saved from carefully staked plants at least *two years previous to certification*, and seed from those staked plants *proved by test* a year in advance of certification. Only the very best tested strains are used for growing our fields for certification.

FIELD INSPECTIONS

Advanced Plant Pathologist K. W. Lauer, of the Bureau of Plant Industry, Department of Agriculture, Harrisburg, Pa., accompanied by Dr. Warren Mack, of Penn State College, and Hal Mills, Plant Breeder for D. Landreth Seed Co., inspect all our tomato fields before the first pickings are made. At least one more field inspection is necessary and sometimes one or two after that before these two inspectors are satisfied that the fields are up to the high standards required.

During these inspections the fields are rated for vigor, and the plants and fruits are carefully examined for disease and trueness to type, whole fields being discarded if they do not meet the very strict requirements.

INSPECTION OF EQUIPMENT

The seed saving machines are inspected, and the processes of washing and drying of the seed are checked.

GERMINATION TESTS

Samples of certified tomato seed are taken by Inspector Lauer direct from the bagged stocks. These are tested for germination at Harrisburg and certificates issued to our Company.

A Field of Landreths' Rutgers Tomato

In spite of unfavorable weather, this field produced a heavy crop of high quality fruit.

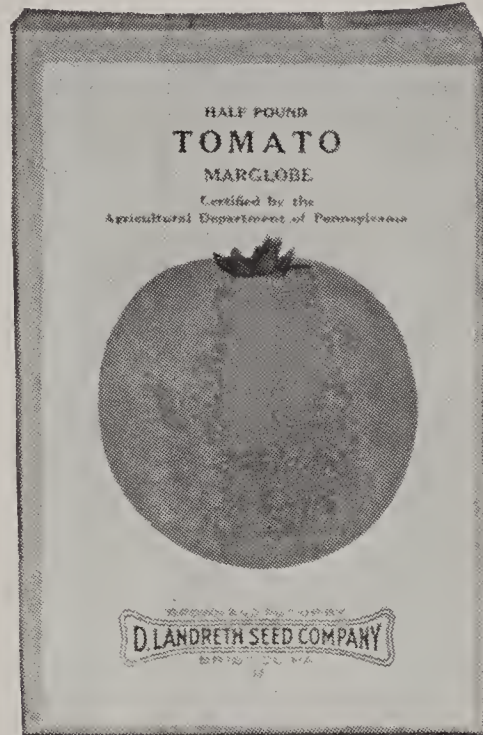
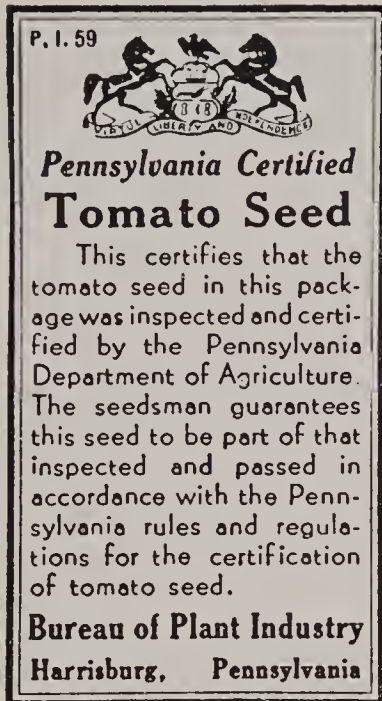


Inspection of Landreths' Pennsylvania Certified Marglobe

Inspector Lauer (left) of Pa. Dept. of Agriculture, and Dr. Mack (right) of Penn State College are seen with Jack Tomlinson, an expert tomato grower. Jack is never interested in a crop unless it produces 15 to 20 tons per acre. And he gets them!

CERTIFICATION STICKERS

The Pennsylvania Department of Agriculture issues pink certification stickers which we paste on each package of certified tomato seed. These stickers state that the tomato seed in the package was inspected and certified by the Pennsylvania Department of Agriculture. We guarantee the seed to be part of that inspected and passed in accordance with the Pennsylvania rules and regulations for the certification of tomato seed.



**LOOK FOR THIS PINK STICKER AND BLUE BOX WHEN YOU BUY
CERTIFIED AND CROWN PICKED CERTIFIED TOMATO SEED**

PROVING OUR TOMATO STOCKS

Besides the many tests which we make every year, a number of samples are sent out to experiment stations and trial grounds all over the country. These tests aid us in checking our findings.

LANDRETHS' PENNSYLVANIA CERTIFIED TOMATO SEED IS GOOD SEED

You can readily see that with all our careful selection and testing, one can hardly expect to get any better tomato seed than Landreths'. All we ask of you is to try it, compare it in a test with the tomato seed you are now using. We would be very pleased to add your name to our long list of satisfied customers all over the world.



An Official New York State Test in 1937

This test at Geneva, New York, showed our Pennsylvania Certified Landreth tomato to be one of the highest yielders of good quality fruits for the canner. In the picture are seen many noted Canners, Seedsmen and Agricultural Experiment Station tomato experts

EFFICIENT TOMATO PRODUCTION PRACTICES*

By JESSE M. HUFFINGTON

Assistant Professor of Vegetable Gardening Extension, Agricultural Extension Service,
The Pennsylvania State College, State College, Pa.

1. Use only disease-free plants that have been grown carefully and hardened properly. Seed should be certified by State authorities for freedom from disease. It is safer, also, to have the seed treated according to instructions from your County Agent and to follow a complete disease control program as outlined by the Extension Specialist in Plant Pathology.

2. Plants should be grown only in clean soil, without tomato refuse, spaced liberally for stocky growth. Excessive watering and prolonged temperatures above 90 degrees Fahrenheit should be avoided. Transplanting and the use of sandy soil will give much better root systems. Steady, uniform growth with liberal spacing will give plants that will start growth at once when planted in the field. Severely hardened, yellowish plants, or soft, slender, dark green plants are extremes to be avoided. If southern grown plants must be used they should be purchased only from the most reliable growers and certified for freedom from disease.

3. Well-drained fields of high fertility with a liberal supply of organic matter are best suited to tomatoes. Applications of manure and sod or green manure crops turned down are necessary for building up the organic matter content and increasing the depth and fertility of tomato soils.

4. Early planting, preferably in May and always before June 5, favors production of the largest yields. Set the plants deeply and firmly into the soil for early development of the root system.

5. In addition to manure, commercial fertilizer should be applied at the rate of 500 to 1,000 pounds to the acre—500 to 750 pounds in the row or 750 to 1,000 pounds broadcast. Indications are that this should contain 0 to 4 per cent nitrogen, 12 to 16 per cent available phosphoric acid, and 4 to 7 per cent potash, depending upon the nature of the soil and the state of fertility. For average soils a 4-12-4 would be satisfactory where no side dressings are to be applied. If a side dressing of nitrogen is to be applied along the row after planting, a 0-12-5 mixture will be satisfactory for the application before planting. The complete fertilizer should always be worked deeply (2 to 3 inches) into the soil, while the nitrates alone may be applied to best advantage after the first blossoms have set fruit.

Fertile clay loam soils respond well to 4-16-4 and even superphosphate alone. On light sandy or shale soils better results likely will be obtained by the use of 4-12-6 or 4-14-6 mixture, and additional side dressing of nitrate of soda, sulfate of ammonia, or calcium nitrate at the rate of 150 to 200 pounds to the acre. The nitrate side dressings should be applied only if needed and the need is indicated by a light yellowish-green coloration of the foliage.

Row applications are most effective when placed in solid bands about two inches from the plant and two inches deep. When mixed with the soil, in the row only, the nitrogen and potash ingredients of the fertilizer are likely to cause injury to the plant, especially in a dry season.

6. Space the plants with at least 15 square feet for each plant—3 by 5 or 4 by 4 feet apart, or more. Five feet between the rows allows more space for spraying or dusting and less injury is done to the vines in picking, and four feet between the plants is highly desirable on fertile soil.

7. Thorough cultivation is necessary to control weeds and avoid hand weeding. The first cultivation is usually deep, but later ones shallow.

8. Consult your County Agent on disease and insect control in the field.

9. Pick only fully ripe, red tomatoes that are firm and without serious defects. Ripe tomatoes weigh more than partially ripe ones and are sold at a higher price per ton.

10. Keep records on your crop to learn how much it costs in labor and actual cash, for plants, fertilizer, picking and hauling.

11. Grow not more acres but better acres of tomatoes because higher yields per acre mean higher quality and greater cash returns. For the same amount of tomatoes larger yields per acre mean fewer acres to plow, to prepare for planting, to cultivate and to weed. Lower the costs and increase the cash income by using better practices in tomato production and marketing.

*This article is reprinted by special permission from "The Penna. Ten Ton Tomato Club Report for 1936".

DESCRIPTIONS OF LANDRETHS' CROWN PICKED PENNSYLVANIA CERTIFIED AND CERTIFIED TOMATO VARIETIES

The demand for Crown Picked Certified Tomato Seed has been so great that we have previously been unable to fill the orders for it. We now have crown picked seed of all the certified tomato varieties listed. For crown picked seed, only the first or crown clusters of fruits are used. Some growers claim that crown picked seed is plumper and therefore produces earlier fruits the following year than the seed from later pickings. Separate descriptions of the crown picked certified tomato varieties are not necessary since those describing the certified stocks will suffice for both.

IN THE FOLLOWING DESCRIPTIONS OF OUR VARIETIES OF TOMATOES, WE HAVE PLACED A STAR ★ BEFORE EACH VARIETY OF WHICH WE HAVE CROWN PICKED CERTIFIED SEED. THE UNCERTIFIED VARIETIES DO NOT HAVE A STAR ★

★ BONNY BEST (CERTIFIED) — 100 Days

This is an old favorite early tomato maturing after Earliana. The fruits are globular when small, becoming slightly flattened when they attain large size. Our strain has been selected for heavy yield, and where Bonny Best, John Baer, or Chalks Jewel is used for market or canning, we highly recommend our Certified Bonny Best as meeting the requirements of this group. In a test at Penn State College in 1935, Landreths' Certified Bonny Best produced the highest yield of marketable fruits of the 10 varieties in the Second Early Group, and the largest average size of fruits. In 1936, a grower in Bucks County produced over ten tons with our Certified Bonny Best.

★ BREAK O'DAY (CERTIFIED) — 95 Days

This recently introduced tomato has become a popular early red variety, grown in some western states with great success. Dr. F. J. Pritchard, of the U. S. Department of Agriculture, originated it by crossing Marvana with the Marglobe.

The vines are very open growing and somewhat resemble Earliana in appearance. The leaves are small and rather short for such a prolific plant. It is quite resistant to disease. The fruits are medium to large in size and quite closely resemble the Marglobe as to shape. Under good cultural and climatic conditions where a heavier vine growth and a somewhat lower summer temperature prevail, the Break O'Day will produce satisfactory external and internal color. This variety is not recommended for light nor sandy soils. It is only a few days later than our Earliana.

★ BROWN'S SPECIAL (CERTIFIED) — 120 Days

A new, late variety of considerable merit for canning, especially suited to the South. The stems of the plant are long, and the leaflets are large and dark green in color. The plant produces the largest amount of foliage of any tomato that we know of, therefore is well suited to lighter soil types. Heavy applications of nitrogenous fertilizers should not be made to this variety.

The fruits resemble Stone and Greater Baltimore in type, being somewhat flattened, but are much larger, averaging 6 to 8 ounces per fruit. The external and internal color is a dark red, and the interior structure is very solid with very small seed cavities. A distinguishing character of Brown's Special is the light green color of the fruits just before they ripen.

Brown's Special produced the highest yield per acre of the 7 varieties in the Late Group and the largest average size per fruit in a test at Penn State College in 1935.

In 1936, this variety also stood highest in yield of 6 late varieties in a test in Ohio.

The crop is produced later than Stone or any of that group. This is a fine juice and canning tomato, on account of its color and productiveness.

★ CHALK'S JEWEL (EAGLEY STRAIN) (CERTIFIED) — 100 Days

This strain has been grown and selected for a number of years by a Pennsylvania farmer. We have been further selecting it for large, smooth fruits of good color. It is of the large Bonny Best type.

★ CLARK'S EARLY (CERTIFIED) — 100 Days

A special strain in the Bonny Best Group, selected for use in Texas. Becoming increasingly popular in that state. Fruits good size and smooth like Bonny Best.

★ GREATER BALTIMORE (CERTIFIED) — 105 Days

A main crop or midseason variety grown in the South and the Middle West. It is earlier than the Stone types, and therefore may produce a more satisfactory crop for you. Our strain of Greater Baltimore has been carefully plant-selected for large sized fruits and for good red internal color and solid structure. The vines are vigorous and healthy. In 1936, a grower in Bucks County produced over 10 tons of fruit per acre.

★ GROTHEN'S RED GLOBE (CERTIFIED) — 95 Days

A new variety of the Break O'Day type developed in Florida. The vines have long stems like Break O'Day, but the leaflets are somewhat larger, and more abundant. The vines stand up better than Break O'Day, and therefore protect the fruit from sunscald.

The fruits are globe-shaped to slightly flattened, as large or larger than Break O'Day, with better external color than Break O'Day. The internal structure is very solid and meaty, and of a darker red color than Break O'Day.

Ten tons of fruit per acre is not an unusual yield for this variety, some good growers producing greater yields. The crop matures at about the same time as Break O'Day.

**★ GULF STATE MARKET (LOUISIANA STRAIN)
(CERTIFIED) — 100 Days**

This pink-fruited variety is gaining back its old popularity in some sections of the South. Our strain was developed by Dr. Julian Miller of Louisiana State University. The vines are large, somewhat resistant to Wilt, and producing many slightly flattened fruits of good size and quality for a pink.

★ JOHN BAER (GENEVA STRAIN) (CERTIFIED) — 100 Days

This is one of the most popular strains of this early variety in New York State. We have been carefully staking and testing plant selections for a number of years, and think we now have a fine type of John Baer. The plants are vigorous and produce a good crop of globe to slightly flattened large fruits.

★ THE LANDRETH (CERTIFIED) — 100 Days

This variety is our own selection and is an improvement on the vast majority of those in the second early group. The fruits are large and solid. The external and internal color is a deep red, making it a good early canning tomato used extensively in New York. In 1936, at a test in Ohio, The Landreth produced a higher yield than the so-called Master Marglobe, Early Stone, Indiana Baltimore, Rutgers, New Stone, Nystate and Brown's Special. The fruits were firm and of good grade, and the vines were heavy and healthy. A grower in Bucks County produced over 10 tons of fruits per acre last year. One large canner in New York has produced the highest canning yields for several years by using Pennsylvania Certified "The Landreth" tomato.

**★ LIVINGSTON'S PINK GLOBE (CERTIFIED) — 100 Days
(LANDRETHS' STRAIN)**

This variety has a large, coarse vine which protects the fruits from sunscald. The fruits are globular when small, becoming slightly flattened and very large when mature. Our strain of this variety is a distinct improvement on the old Pink Globe variety, in fact our opinion is that Landreth's Crown Picked Strain of Livingston's Pink Globe tomato can take the place of any of the old pink or purple varieties now grown. Try it.

★ MARGLOBE (CERTIFIED) — 100 Days

This variety is undoubtedly the best of all recent introductions. It was developed, named and introduced by the late Dr. Pritchard, of the Bureau of Plant Industry, United States Department of Agriculture, Washington, D. C. It has been vastly improved by us since its introduction by individual plant selection so that it is nearly perfect. It is globular

in shape, deep red color, very little depression at the stem end, has few seeds and does not crack readily. The blossom scar is very inconspicuous. It has solid internal structure, no green core and is most productive, one of our ten acre fields in 1934 producing over 210 tons, that is at the rate of 21 tons of red ripe fruits to the acre. In 1936, six growers in Bucks County produced over 10 tons per acre with our Certified Marglobe. In Ohio, our Marglobe yielded 1½ tons more per acre than the so-called Master Marglobe. In this test it was stated that Landreths' Marglobe had very nice tomatoes all through the season. It was their best variety. The vines are robust and as wilt-resistant as any variety we have ever seen. It possesses everything desirable in character and is a most attractive tomato in every way. The Northern market much prefers a red tomato to a pink. The growers have been using a Pink Globe because Red Globes were unknown anywhere until the last 10 years. Marglobe has been found to be the best tomato which can be grown in Florida and other parts of the South for shipping to Northern markets. We recommend the Marglobe for market gardeners, home gardeners and canners. The seed which we offer is all grown by us and is an improved strain of the original stock obtained from the late Dr. Pritchard. We cannot say too much for our strain of Marglobe and we hope all our customers will order it.

If we were going to recommend only one variety of tomato, we would name our Marglobe, as it is suited to practically all conditions and soils, and the surest cropper of any on the market, and therefore the most profitable of all varieties. It is very solid, and therefore contains few seeds.

Due to confusion in the three types of foliage which we formerly supplied in Marglobe, we have discontinued Strains A, B, and C, and are now offering only a medium heavy foliage type which seems to fit all uses of this variety. This is a selection from Strain A, and retains the fine globe shape of the fruits, as well as the heavy yielding qualities and the foliage of that strain. For those who wish a very heavy foliage, we now offer the Rutgers variety, and for the lighter types we have Grothen's Red Globe.

Ask your own State Agricultural Experiment Station about our strain of Marglobe. Not only is the Landreth Strain of Marglobe of fine globe-shape, but it produces larger crops than most other strains of this variety. Yield records were taken on strains of Marglobe at Penn State College in 1934. The results were as follows:

		Total Yield	
		Tons Per Acre	Percent. Marketable
MARGLOBE, CERTIFIED A	LANDRETH	18.2	54
Master Marglobe	New Jersey Seedsman	16.0	53
Marglobe	Connecticut Seedsman	15.8	49
Marglobe Certified	Another Penna. Seedsman	15.5	43

You will note that Landreths' Strain A, the strain now being used by us exclusively, produced over two tons more per acre than the next highest seedsman's stock. Yield per acre is important to the grower.

★ **NORTON (CERTIFIED) — 115 Days**

Where wilt disease is present, this late tomato of the Stone Group can be used with success since it has some resistance to this disease. The fruits are solid, of good color but not quite as deep as Landreths' Red Rock.

★ **NYSTATE (CERTIFIED) — 100 Days**

A new red variety from the Geneva Experiment Station. Developed especially for the canners of New York. Midseason, Bonny Best type, with flattish round fruits of good external and internal color. Does not crack at the stem end as readily as some other varieties.

★ **PENN STATE (CERTIFIED) — 90 Days**

The Penn State is a new hybrid created by crossing Cooper's Special with Earliana. A development of Dr. Myers, of Penn State College. This is a self-topping type of vine with short thick stems, and large, coarse dark green leaflets. Because of the small size and compactness of the plants, they may be set in rows 3 feet apart, and 18 to 24 inches between the plants in the row. This close planting tends to bunch up the foliage, thus giving some protection to the somewhat exposed fruits.

The fruits are borne in clusters of 4 to 6, closely set in the center of the plant, several clusters generally being found bunched together within a very small radius from the main stem. The fruits are medium in size, smooth, slightly flattened, of good red outside and inside color, and of fine solid internal structure with small seed cavities.

The total tons of marketable fruits of Penn State are generally better than Earliana because the fruits are smoother and ripen up more evenly than this variety. Since the plant tends to bunch the majority of the fruit at the center, and these fruits tend to ripen at about the same time, only 3 or 4 pickings are generally necessary to harvest the complete crop. In most sections, Penn State will mature as early as Earliana. Do not confuse Landreths' Certified Penn State Tomato with what was sold by other seedsmen in 1936. Our stock has been carefully hand selected to remove the off-type plants found last year. A grower, in 1936, produced over 10 tons per acre with our Certified Penn State

★ PRITCHARD or SCARLET TOPPER (CERTIFIED) — 95 Days

The Scarlet Topper or Pritchard tomato, a new variety of considerable merit, was developed by the late Dr. Fred J. Pritchard, of the United States Department of Agriculture. Cooper's Special, a self-topping pink tomato, was crossed with Marglobe, a red variety now widely grown.

The plants of the new variety Pritchard (Scarlet Topper) are comparatively small, the leaves and stems a little coarser than those of Earliana. The vines are branching and fairly short, the tips ending in clusters of fruit or leaflets, thus giving it the name of "Topper."

The fruits are produced possibly a few days later than Earliana, medium in size and globular or slightly flattened at the blossom end. Features of this variety which strongly appeal to canners, are its dark red interior, as well as exterior color, and its extreme solidity. Another strong point in its favor as a canning tomato, is its large yield of ripe fruit on rich soil over a short picking period. The Pritchard (Scarlet Topper) has a richer, deeper red internal color than Marglobe. Do not plant this variety on light, sandy nor poor soil. It is best grown on rich soil. The plants should be set closer in the row than other varieties with larger and coarser vines. In two State Agricultural Experiment Station tests during 1933 and 1934, our strain of Pritchard was the unanimous choice for first place by all the judges. In 1935, in a test at Penn State College, our Certified Pritchard produced the highest yield per acre of the 5 strains tested, the highest percentage of marketable fruits, and the largest average size of fruits.

★ RUTGERS (CERTIFIED) — 100 Days

This new tomato was produced by Prof. Schermerhorn of The New Jersey Agricultural Experiment Station. It was developed by crossing Marglobe with the J. T. D.

The Rutgers produces a rather large plant with thick stems and large leaflets, somewhat larger in all respects than Marglobe. On good, rich land, heavy applications of nitrogen should not be made, for Rutgers is a strong grower. The natural abundance of foliage serves as ample protection from sunscald of the fruits when light, sandy soils are used.

The fruits are somewhat larger than Marglobe, and about the same size as Break O'Day. Being larger than Marglobe, they tend to flatten out more than this variety, not being quite as globe-shaped. The external color is dark red. The internal structure is as good as our Marglobe or Break O'Day, having thick outer and inner walls, and very small seed cavities. The internal color is darker red than Marglobe.

It is claimed that the Rutgers makes juice of low acidity and fine flavor, intermediate between the sweet Marglobe and the very tart late varieties. It is a good canning tomato.

It is claimed Rutgers will yield as well as Marglobe, and on light, sandy soil will surpass this variety, since the vines offer more protection for the fruit. In 1935, in a test at Penn State College, our Certified Rutgers produced the highest marketable yield per acre of the 4 strains in the test, and the largest average size of fruits. In 1936, two growers in Bucks County produced over 10 tons per acre with Landreths' Certified Rutgers.

★ STONE (CERTIFIED) — 115 Days

This late selection of the Stone tomato is not as large as the Landreths' Red Rock fruits nor are the plants quite as heavy in foliage. Many growers use it for canning since the fruits are very solid and of a good dark red color. It has some resistance to wilt.

★ LANDRETHS' SUNRISE (CERTIFIED) — 85 Days

We believe this strain is superior to others in the Earliana Group. The vines are small and compact but produce an abundance of large, red, smooth fruits under good cultural and soil conditions. For best results, plant Landreths' Sunrise on good soil, and closer in the row than larger vined varieties.

UNCERTIFIED TOMATO SEED

We believe that the varieties of tomatoes now certified in Pennsylvania, are the best that can be grown in the world. However, certain other varieties have special uses and are grown in a limited way in some parts of the country. It would not pay to enter for certification such limited amounts of seed of these varieties. Besides these special varieties, we offer uncertified seed of the varieties which are certified.

THE BLOOMSDALE — 105 Days

The Bloomsdale is one of the finest midseason varieties we have ever seen. It is of the Greater Baltimore type, but the fruits are larger and deeper than other strains we have tested. It is especially adapted to canning. Reports from Texas show that it is suited to that territory.

EARLIANA — 90 Days

This variety is used by market gardeners for a first early. It produces an abundance of medium-sized fruits on a small vine.

GLOVEL — 100 Days

Called a Pink Marglobe. A new U. S. Dept. of Agriculture tomato created by crossing Pink Globe with Marvel. Medium sized, globular, pink fruits on a medium sized vine.

GOLDEN QUEEN OR TROPHY — 100 Days

The foliage of this variety is similar to Ponderosa. The fruits are medium to large in size, flattish round in shape, and a golden yellow color. If one prefers a mild, sweet flavored tomato, this is just the variety for them.

MARKET CHAMPION — 120 Days

A late-maturing variety, producing very large fruits. Vine large and coarse. Fruits large, flattish round, fairly good color. Our Brown's Special is superior to this variety as fruits are as large, of better color, and smoother exterior.

LANDRETHS' RED ROCK — 115 Days

For those who want a fine, solid tomato, much later than Marglobe and which is very large and deep for a selection in the Stone Group, this new strain is just the thing. This variety is especially adapted to canning and juice making, having a fine, solid interior and an exceptionally deep red color, both external and internal. It makes very fine pulp for soup. The plants are very large, and the foliage heavy, producing the crop very late in the season. Where a late tomato can be grown this new selection is worth trying.

OXHEART — 118 Days

This is a very late tomato with long, thin vines and light foliage, extremely spreading in habit. The fruits are purple or pink in color, enormous in size, the shape of a beef heart, and with such a solid internal structure that there is very little room left for seed. Will not produce over 3½ lbs. of seed to a ton of fruit. The flavor is very mild and sweet which is preferred by some people to the more acid flavors.

PONDEROSA OR BRIMMER — 115 Days

The foliage of this variety is large and very spreading. The fruits are purple or pink in color, very large and flattish round in shape, somewhat irregular and a rough exterior. Some call this variety "Beefsteak," while others use the same name for the Crimson Cushion, a red, large-fruited, flat variety. Since the internal structure is very solid, Ponderosa is favored by many as a home garden variety.

PEAR SHAPED RED — 100 Days

Small pickling fruit shaped like a pear.

PEAR SHAPED YELLOW — 100 Days

Small yellow fruit shaped like a pear.

PLUM SHAPED RED — 100 Days

2 inches long by $\frac{3}{4}$ to 1 inch in diameter, the shape of a plum. Fruit bright or scarlet red, used in pickling in unbroken form.

PLUM SHAPED YELLOW — 100 Days

Same as plum shaped red in every particular except in color. Used in pickling in whole form.

STONE — 115 Days

Our new strain of Stone produces the largest fruits in the late-maturing varieties, having a red color, some specimens weighing nearly a pound each. The fruits are naturally flat because of their large size, but are very deep in proportion. This is a heavy yielding strain, and is highly recommended where the Stone is used.



Landreths' Pennsylvania Certified Penn State Tomato

One of the best yielding varieties for very early planting. Fruits are large in size, solid and of good dark red color. Over ten tons of fruit per acre can be obtained on good soil.

See your nearest Landreth dealer or write to us for prices on Our Certified, Crown Picked Certified and Uncertified Tomato Seed;
also

Write for Our Catalog covering a complete line of Vegetable Seeds,
Flower Seeds and Lawn Grass Seeds.

D. LANDRETH SEED CO., BRISTOL, PENNA.